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Thank You For Joining!

We will get started at 10:00am

Webinar Logistics

- All attendees are muted
- Submit questions to the Q&A box
- This webinar will be recorded and shared with webinar attendees and posted online at <https://www.dec.ny.gov/chemical/41831.html>





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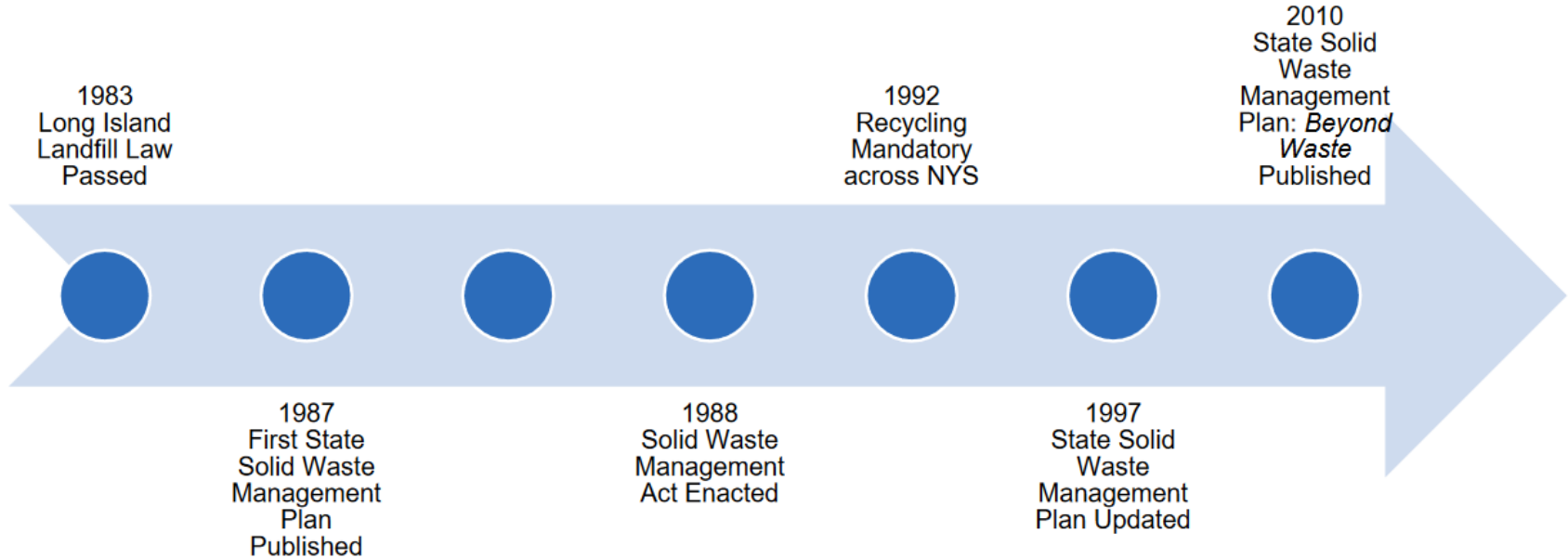
Draft New York State Solid Waste Management Plan

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Division Director, Division of Materials Management

Informational Webinar
April 11, 2023

History of State Solid Waste Management Plans

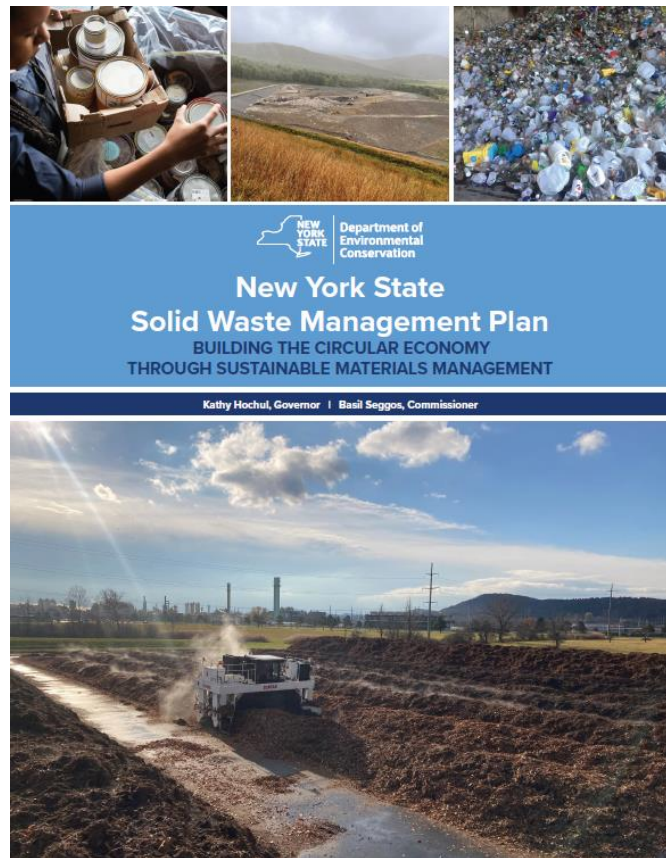


Overview of Draft State Solid Waste Management Plan (SSWMP)



Table of Contents

- Glossary of Terms
- Message From the Commissioner
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- Introduction
- Background on Waste Management in NYS
- Issues, Challenges, and Opportunities
- Values and Vision
- The Future of Materials Management in NYS
- Waste Projections and Goals 2023-2050
- Conclusions
- Appendices



Main Plan

- Background on current solid waste management in New York State;
- Issues, challenges, and opportunities including:
 - Climate
 - Throw-away culture
 - Global markets
 - Information sharing and technology
 - Equity issues
 - Ecosystem impacts
 - Emerging contaminants sampling and research
- Values and visions with regards to materials management in New York State and the guiding principles that will provide the direction and structure to get us there
- 6 Focus Areas and a detailed roadmap of the actions that must be taken to achieve the waste disposal reduction goals through 2050.



Appendices

- A. State Plan History
- B. Accomplishments since 2010
- C. New York State Waste Generation and Waste Imported
- D. Solid Waste Management Facilities and Transporters
- E. Regional Solid Waste Management and Planning Unit Summaries
- F. Local Government Materials Management – Facts and Figures
- G. Disadvantaged Communities and Potential Environmental Justice Area Impacts
- H. Projections and Waste Characterization
- I. New York State Materials Management Laws and Relevant Regulations



New York State's Solid Waste Plan

- Provides high level data and action agenda articulating goals to inform local solid waste management plans.
- Fosters development of a robust sustainable materials economy.
- Ensures the safe management of materials to protect public health and the environment.
- Promotes full public participation, and advance fairness and environmental justice.

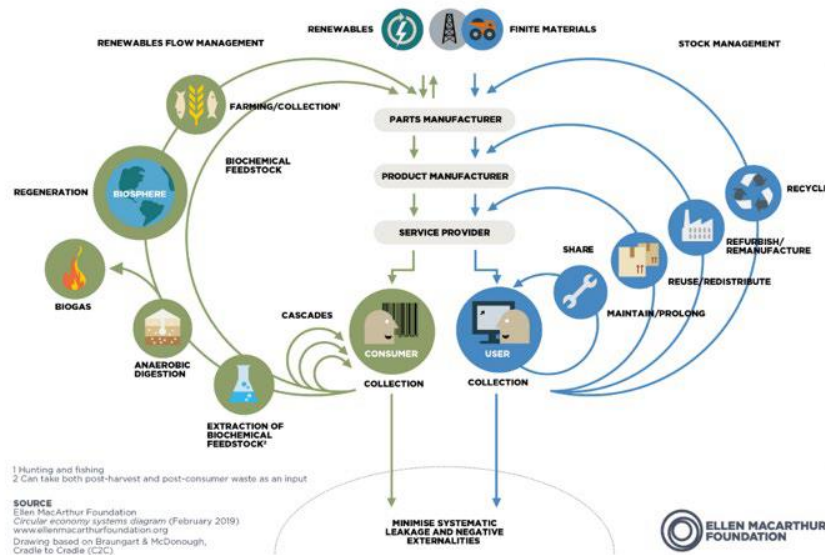


Circular Economy

Shift away from the linear “take, make, toss” model

Circular economy

- Design out waste and pollution;
- Keep products and materials in use; and
- Regenerate natural systems.



Plan Focus Areas

- Waste Prevention, Reduction, and Reuse
- Recycling And Recycling Market Development and Resiliency
- Product Stewardship and Extended Producer Responsibility
- Organics Reduction and Recycling
- Toxics Reduction in Products
- Design and Operation of Solid Waste Management Facilities and Related Activities



Vision

- Landfilling is reduced by 85% by 2050
- The circular economy is realized
- Collaboration and innovation are commonplace
- “Waste” is a concept of the past
- Climate change mitigation is fully implemented
- Shared responsibility is a given
- Equitable, inclusive, and accessible waste reduction and reuse efforts are widespread
- Responsible and resilient markets thrive



Climate Leadership and Community Protection Act (CLCPA)

- Effective on January 1, 2020.
- Final Scoping Plan released December 2022
- Among other things, the CLCPA:
 - Directs DEC to establish GHG emission limits
 - Requires a 40% reduction in statewide GHG emissions from 1990 levels by 2030 and an 85% reduction by 2050
- The Waste Sector is a sizable contributor to GHG emissions responsible for 12% of statewide GHG emissions



Issues, Challenges, and Opportunities



Issues, Challenges and Opportunities

- Climate
- Throw-away culture
- Global markets
- Information sharing and technology
- Equity issues
- Ecosystem impacts
- Emerging contaminants sampling and research



Background on Waste Management in New York State

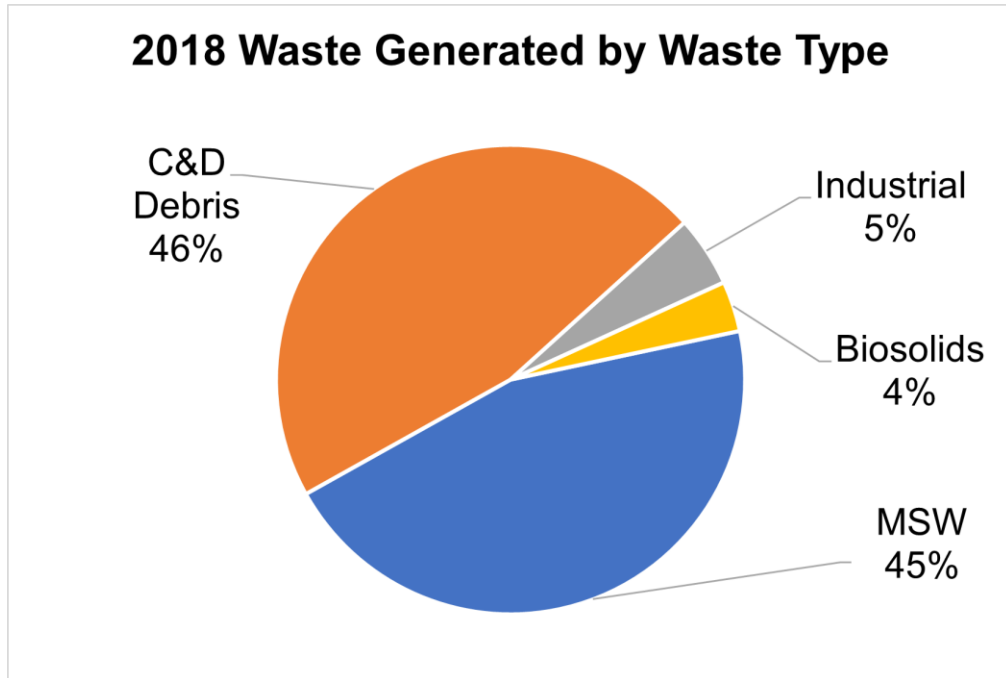


2018 Waste Generated by Type in New York

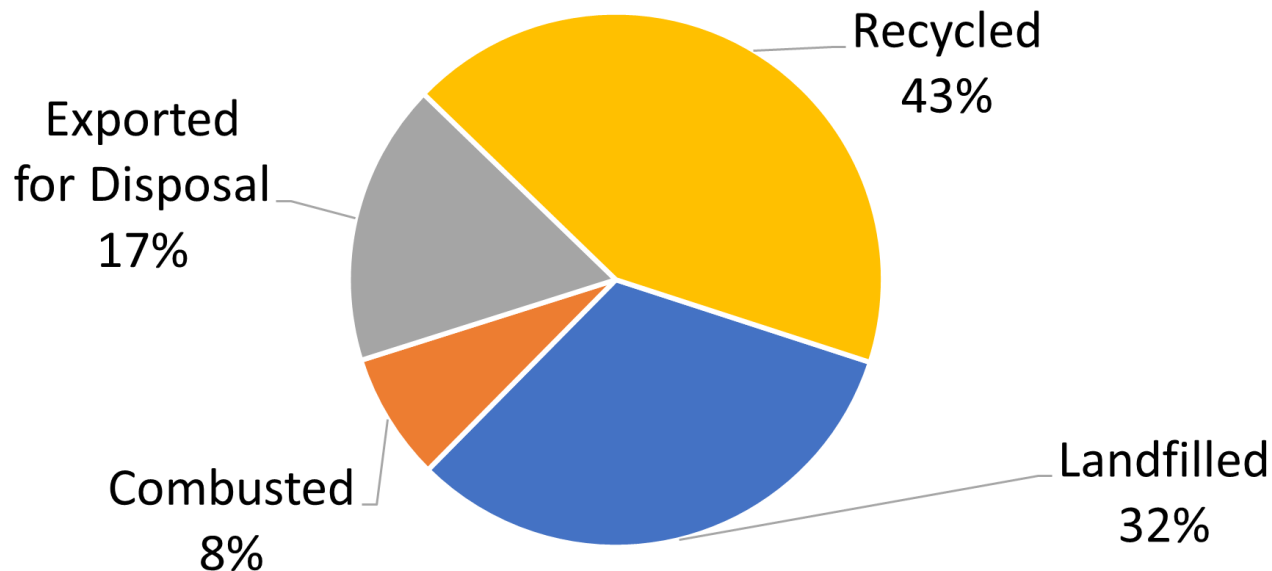
Total waste stream generation was 42.2 million tons in 2018.

Recycling rate increased

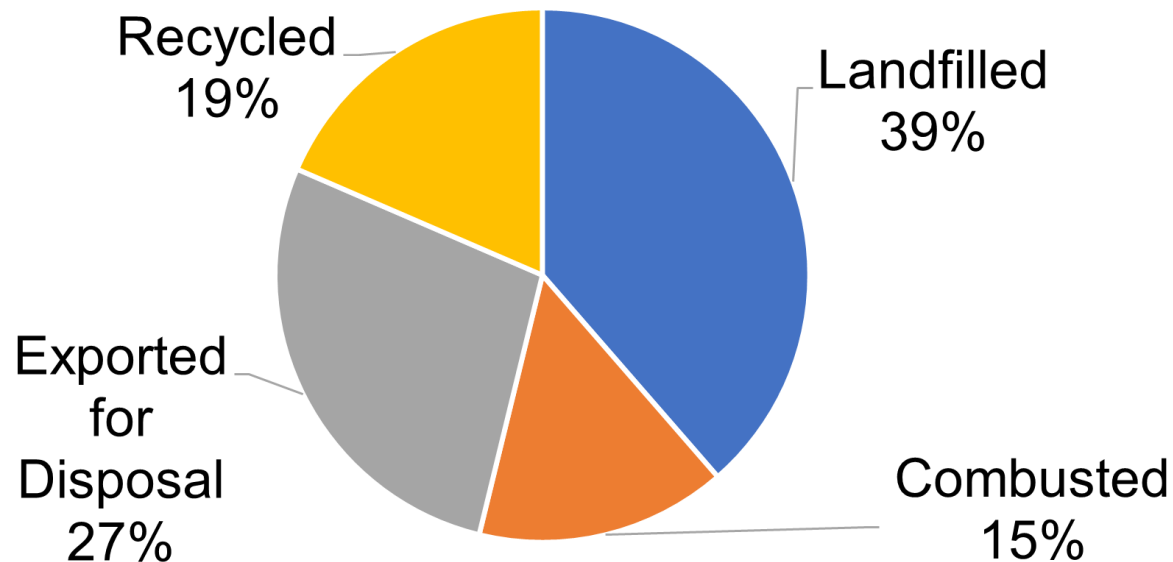
- 36% in 2008
- 43% in 2018



2018 Management of Total Waste Stream Generated in New York



2018 Management of MSW Generated in New York



MSW Recycling Rate

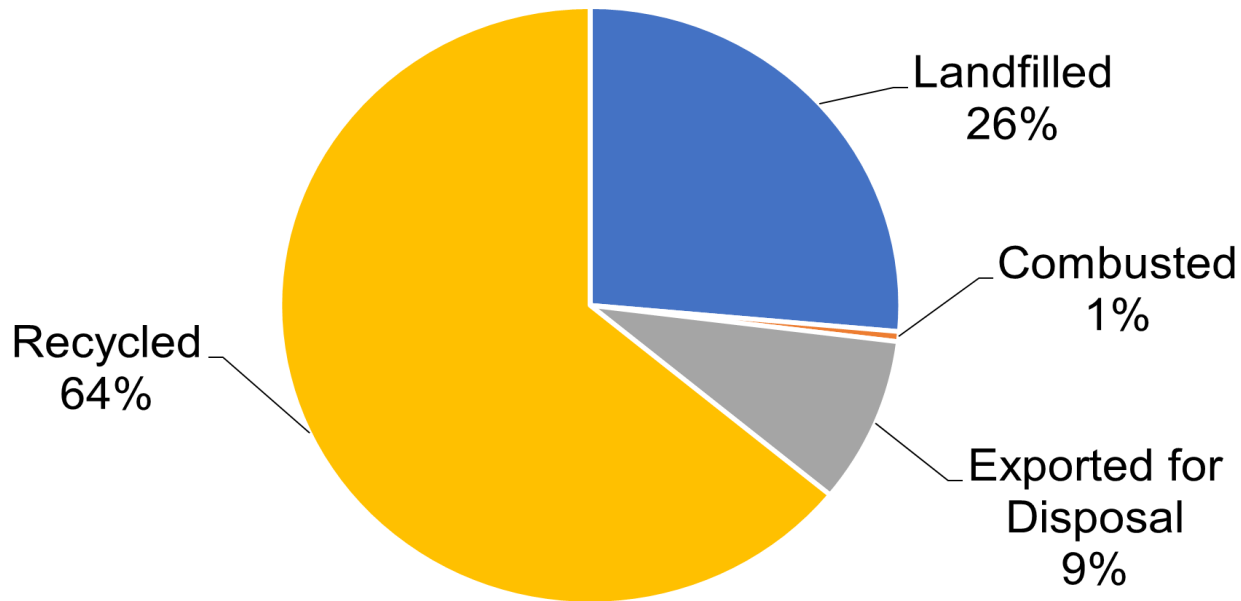
20% in 2008

19% in 2018



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2018 Management of C&D Debris Generated in New York



C&D Recycling Rate

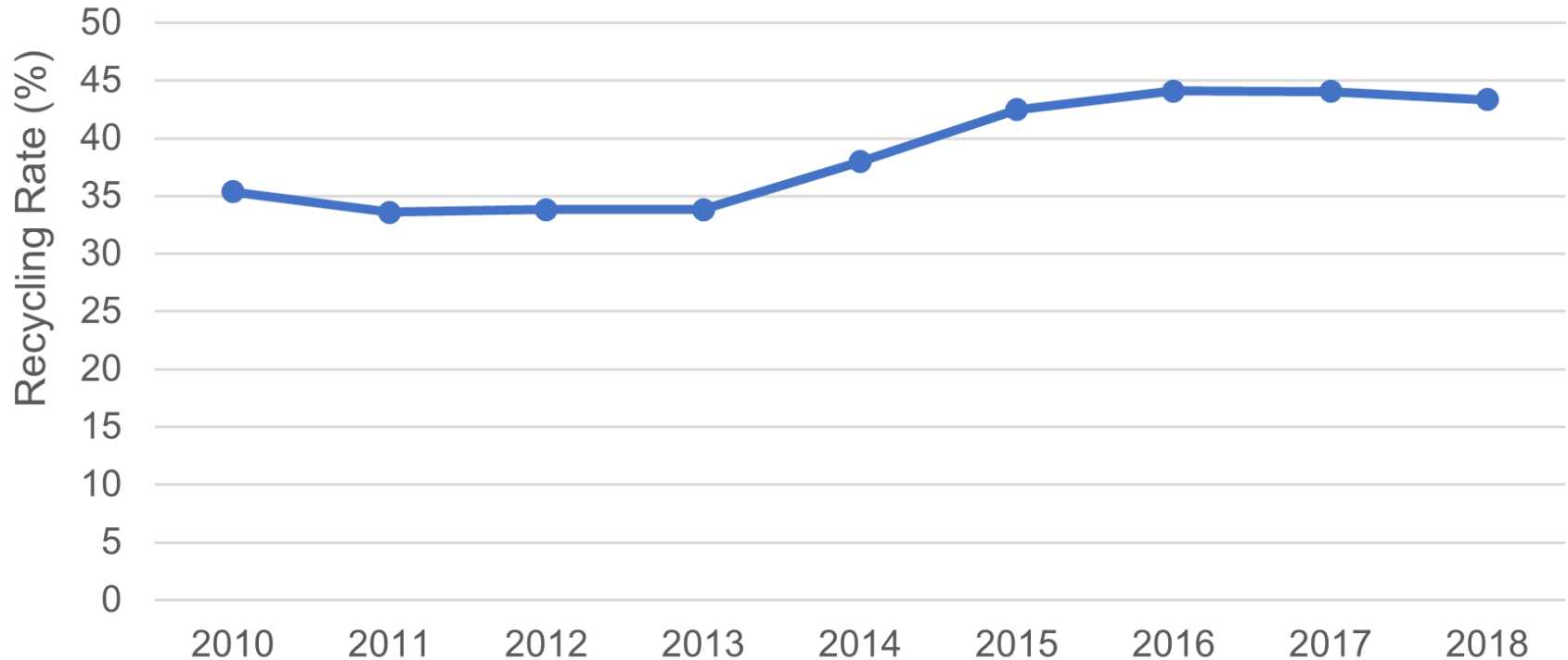
55% in 2008

64% in 2018

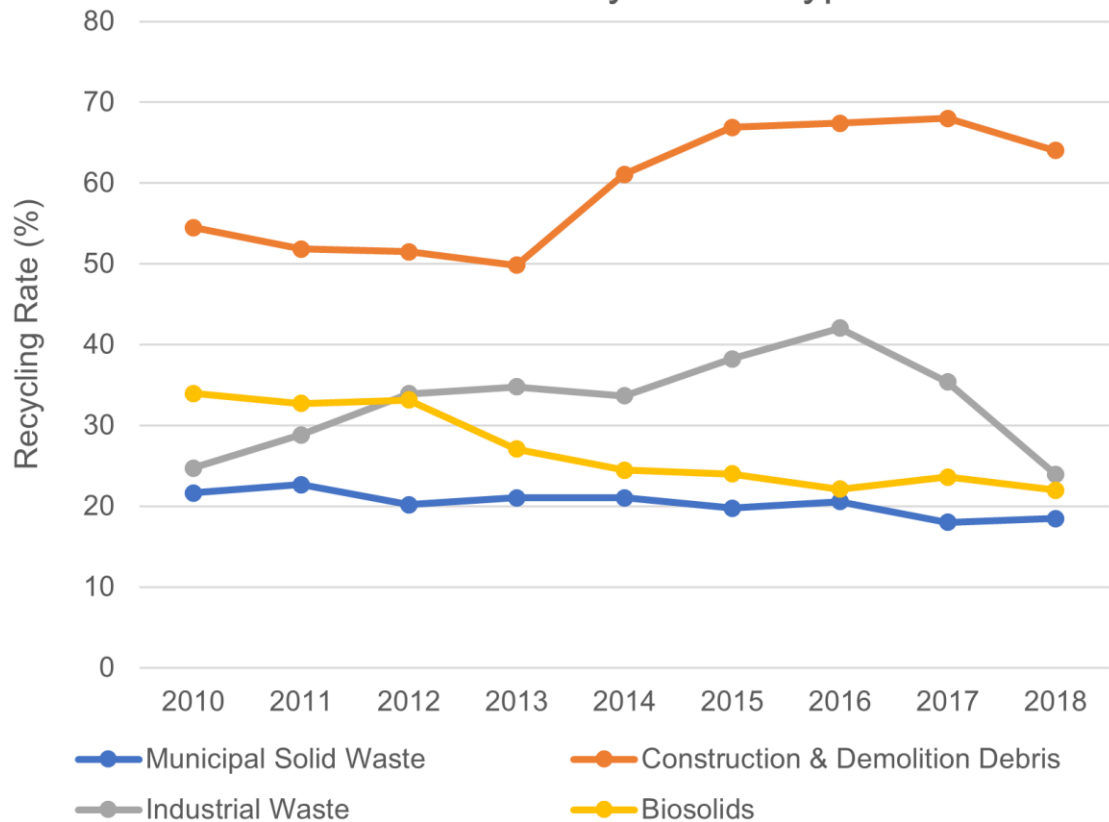


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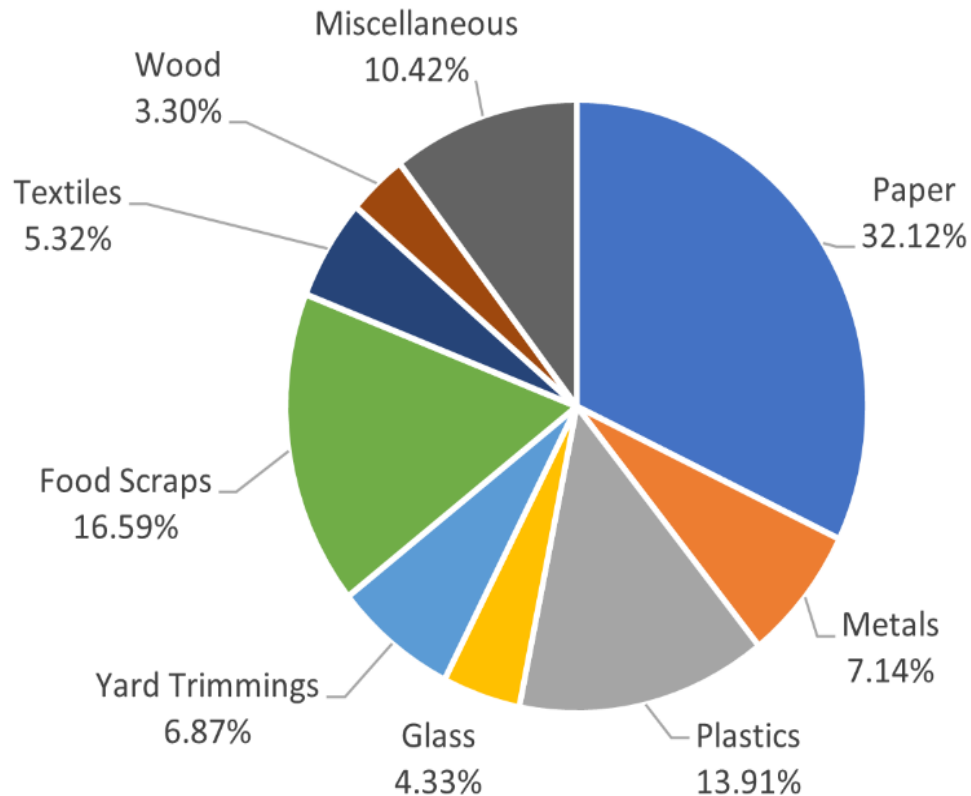
Recycling Rate for Total Waste Stream Generated in New York



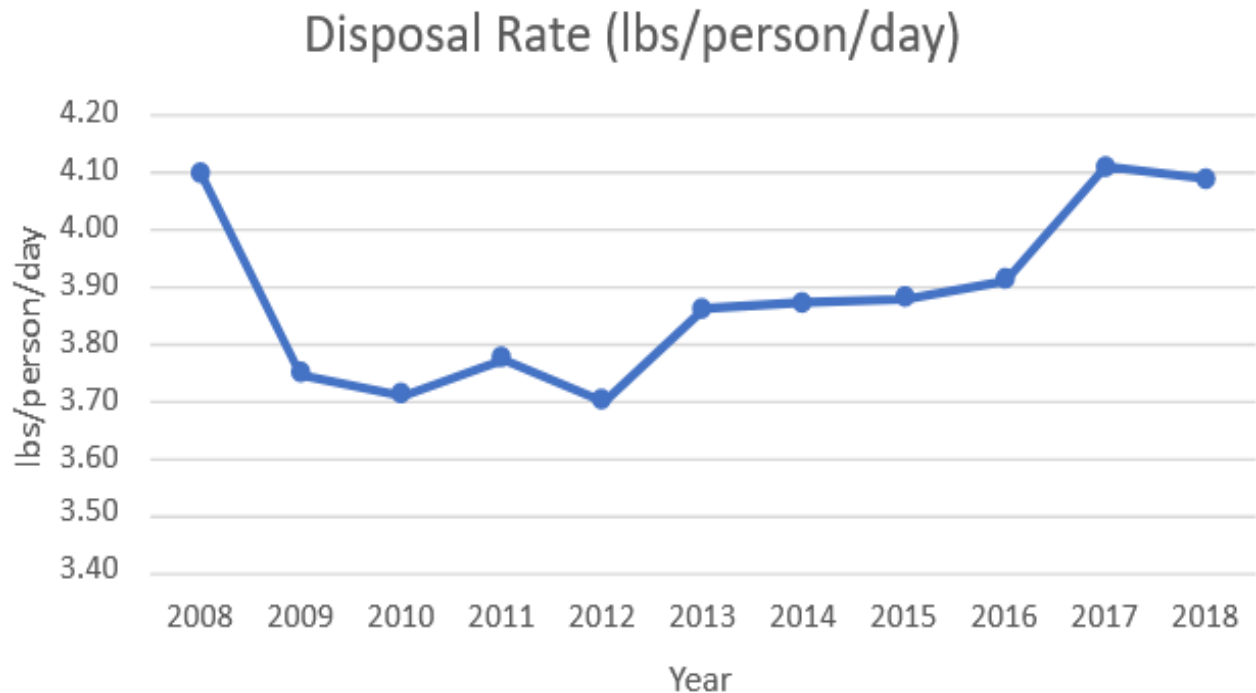
Recycling Rates for Waste Generated in New York by Waste Type



MSW Materials Composition (%)



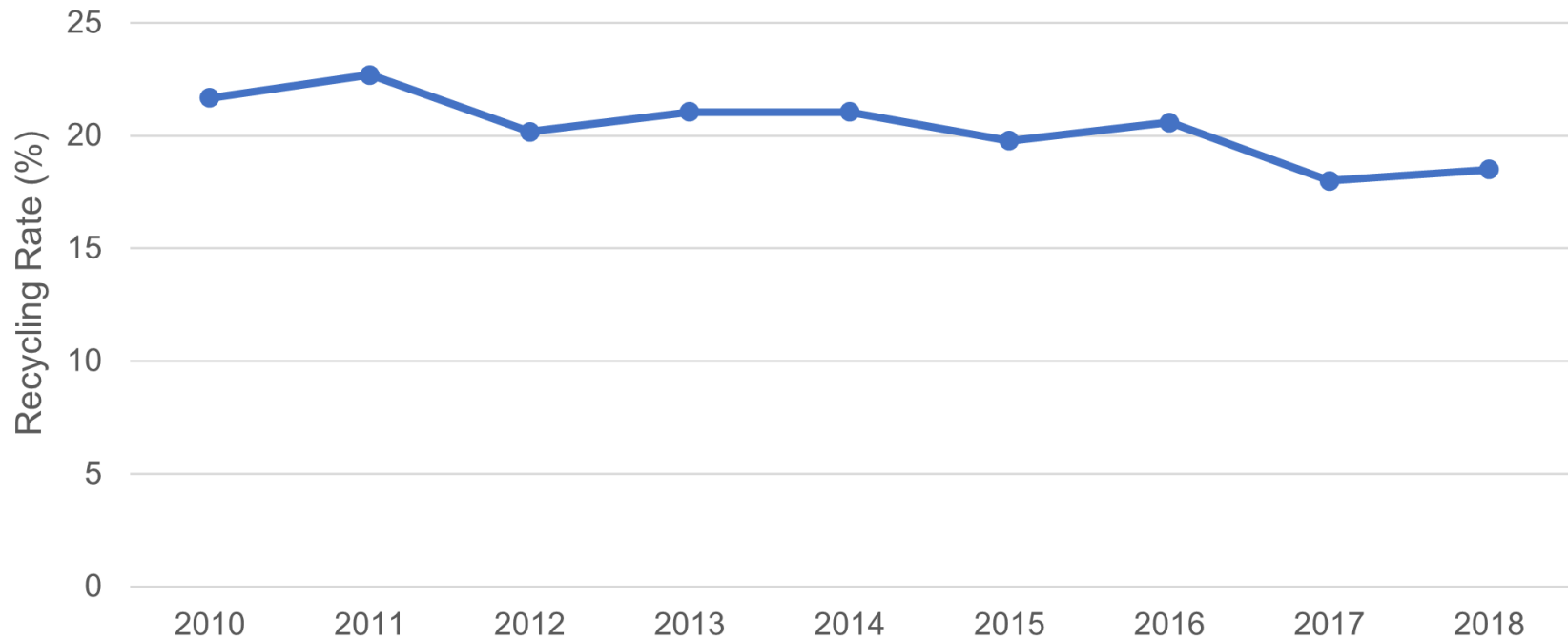
Year	Disposal Rate (lbs/person/day)
2008	4.10
2009	3.75
2010	3.71
2011	3.77
2012	3.70
2013	3.86
2014	3.87
2015	3.88
2016	3.91
2017	4.11
2018	4.09



The state remained essentially at the same disposal rate of pounds of MSW per person per day in 2018 (4.09) as in 2008 (4.10).



Recycling Rate for MSW Generated in New York



Regional Waste Management Variability

DEC Region	Population	MSW Disposal Rate (lbs./person/day)	Recycling Rate (%)*			Waste Composition (%)*			
			MSW	CDD	Total Waste	MSW	CDD	IND	BIO
1	2,832,331	4.50	20%	60%	43%	41%	58%	-	1%
2	8,390,081	3.54	19%	66%	43%	46%	52%	1%	1%
3	2,322,431	4.06	22%	61%	38%	57%	40%	1%	2%
4	925,618	4.02	28%	66%	40%	51%	38%	9%	2%
5	581,970	3.75	21%	4%	22%	54%	20%	15%	11%
6	537,866	3.24	20%	1%	12%	51%	34%	12%	3%
7	1,165,354	3.35	22%	25%	21%	51%	38%	6%	4%
8	1,326,787	3.61	19%	38%	26%	46%	42%	6%	6%
9	1,420,330	4.31	20%	65%	32%	49%	32%	14%	5%



Solid Waste Management Facilities



Collection of Residential Waste

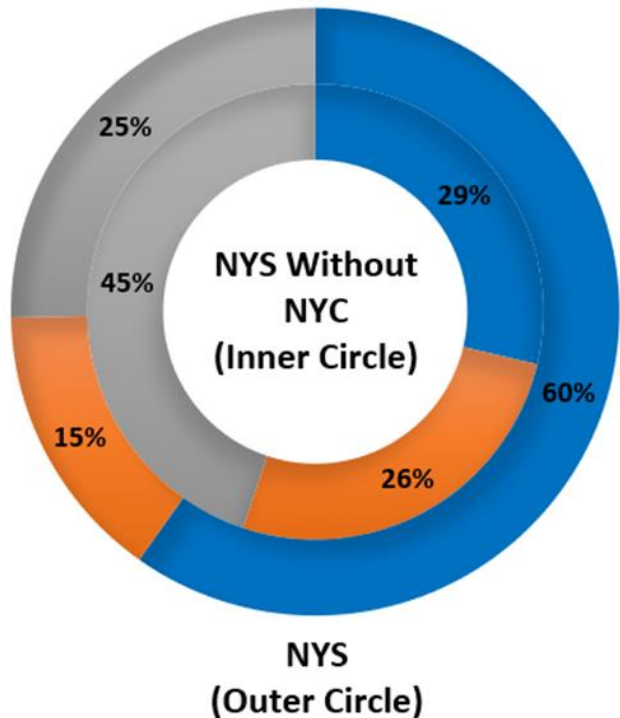
New York City

- NYC represents about 44% of the state's population and provides unique level of municipal service to multi-residential residences.

Statewide (minus New York City)

- 45% of residents subscribe directly for collection services with private waste collectors.
- 29% of residents receive direct municipal curbside collection services.
- 26% of residents are served by municipalities contracting private waste collection services on behalf of residents.

■ Municipal Collection ■ Municipally Contracted ■ Privately Contracted



Disposal Capacity



- 25 MSW landfills
- Combined capacity ranges from 16-25 years
- 19 years capacity if full permitted capacity used by each landfill



Disposal Facilities

Landfills

- 19 of 25 active landfills are owned by municipalities
- By capacity, privately owned and operated landfills and privately operated / municipally owned landfills account for 82% of working MSW landfill capacity in 2018.

MWCs

- 1 of the 10 MWCs owned and operated by a municipality.
- By capacity, 98% of working MWC capacity in 2018 owned or operated by private companies.



Impact of Waste Management on PEJAs and DACs

PEJAs: Potential Environmental Justice Areas

DACs: Disadvantaged Communities



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Identification of PEJAs and DACs

Potential Environmental Justice Areas (PEJA)

- At least 52.42% of the population in an urban area reported to be members of minority groups; or
- At least 26.28% of the population in a rural area reported to be members of minority groups; or
- At least 22.82% of the population in an urban or rural area had household incomes below federal poverty level

Disadvantaged Communities (DAC)

- Located within census block groups that meet the HUD 50% AMI threshold, that are also located within the a PEJA
- Located within New York State Opportunity Zones (low-income census tract with an individual poverty rate of at least 20 percent and median family income no greater than 80 percent of the area median)



Impact of Waste Management on PEJAs and DACs - Statewide

- **From a population perspective**
 - 46% of the population lives in a PEJA
 - 36% of the population lives in a DAC
- **Based on the total number of all solid waste management facilities**
 - 25% of solid waste management facilities are located in a PEJA
 - 33% are located in a DAC
- **Based on the facility throughput**
 - 37% of the total waste stream was managed at facilities in a PEJA
 - 57% of the total waste stream was managed at facilities located in a DAC



Impact of Waste Management on PEJAs and DACs – New York City

- **From a population perspective**
 - 72% of the city's population lives in a PEJA
 - 50% of the city's population lives in a DAC
- **Based on the total number of all solid waste management facilities**
 - 77% of solid waste management facilities are located in a PEJA
 - 83% are located in a DAC
- **Based on the facility throughput**
 - 66% of the total waste stream was managed at facilities located in a PEJA
 - 88% of the total waste stream was managed at facilities located in a DAC



Solid Waste Management Facilities in PEJAs & Quantity of Waste Handled

	Statewide		Potential Environmental Justice Areas				
	Total Number of Facilities	2018 Total Throughput in Tons (capacity)	Percentage of Population	Number of Facilities	Percentage of Total Number of Facilities	2018 Throughput in Tons (Capacity)	Percentage of Total Throughput Handled by Facilities in PEJAs
NYC	185	13,350,665	71.5%	142	76.8%	8,801,808	66.0%
Outside NYC	2618	41,142,922	25.8%	563	21.5%	11,447,172	28.0%
Total NYS	2803	54,493,587	45.8%	705	25.2%	20,248,980	37.0%

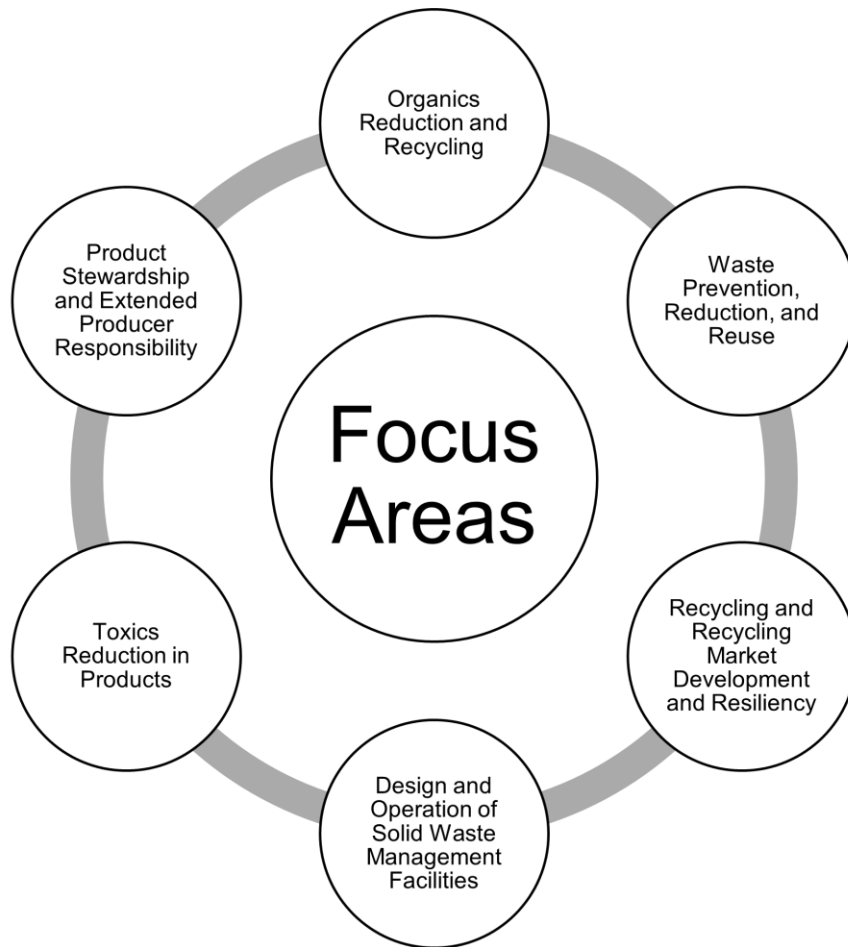
For more information, see Appendix G of the draft SSWMP
Throughput and type of the facility is important to consider when looking at this data



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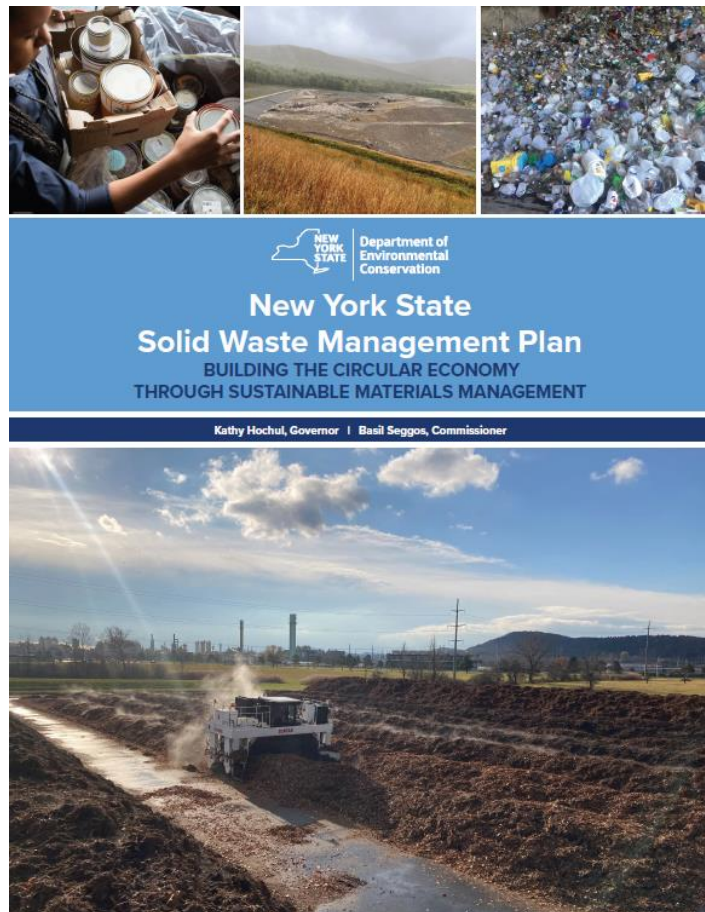
Future of Materials Management in NYS





Action Items

- 168 action items spread across 31 goals
- 33 action items require legislative action
- Action items are aligned with the recommendations in the CLCPA Final Scoping Plan



Focus Area: Waste Prevention, Reduction, and Reuse

Increase prevention, reduction, reuse, and repair opportunities for New York State residents (Right to Repair legislation, K-12 curriculum and sharing tables, and outreach and education on reuse and refill)

Support prevention, reduction, and reuse in the commercial and industrial sectors through education, engagement, and policy

- Support refill and reuse solutions for foodservice
- Advance circularity in furniture
- Enhance secondary markets for textile goods
- Study the issue of unsold retail goods and work to prevent disposal
- ‘Rethink Waste’ campaign



Focus Area: Waste Prevention, Reduction, and Reuse (cont'd)

Foster community resiliency by developing programs and supporting proposals and initiatives that prevent and reduce waste, and promote reuse.

- Support legislative proposals restricting and reducing single-use plastics
- Support legislative proposals enhancing the implementation of the New York State Bag Waste Reduction Law
- Advance community-level reuse and repair programs
- Continue to assist with technical assistance to local communities on prevention, reduction, and reuse



Focus Area: Recycling and Recycling Market Development and Resiliency

- **Support proposals, such as EPR for paper and packaging,** that motivate products to reduce the amount of material entering households
- **Increase research collaborations** to improve residential recycling education and promote improved recycling strategies for all sectors
- **Partner with K-12 Schools, colleges, and universities** to educate, engage, and empower students
- **Reduce waste disposal through innovative policy approaches**
- **Support pathways for increased textile and furniture circularity**
- **Support efforts to build capacity for processing secondary materials commodities collected for recycling**
- **Encourage the development and expansion of recycling markets by demonstrating the state's ability to “lead by example”**



Focus Area: Product Stewardship and Extended Producer Responsibility

- **Support broad packaging and paper product legislation** to include all types of products by all generators
- **Work to improve the state's existing products stewardship and EPR programs** (e-waste, rechargeable batteries, mercury thermostat, postconsumer paint, pharmaceuticals, carpet)
- **Promote the development and passage of EPR framework legislation and EPR legislation for priority products**



Focus Area: Organics Reduction and Recycling

- **Support expansion of the Food Donation & Food Scraps Recycling law**
- **Support and grow the organics recycling industry** (guidance, trainings, financial assistance)
- **Empower residents to compost** at home or through community programs
- **Expand markets** for use of compost, digestate and other end products
- **Engage the farming and agriculture community** (composting on-site, compost use, land application, animal feed, etc.)



Focus Area: Toxics Reduction in Products

Leverage partnerships to expand knowledge of harmful chemicals in products to promote their reduction

- Work with partners to better understand the presence of toxic chemicals such as PFAS and identify preferable alternatives

Support legislation, policy, and initiatives that reduce the presence of toxic materials and contaminants in products

- Support initiatives that ban materials and chemicals that are a growing concern for people and the environment



Focus Area: Design and Operation of Solid Waste Management Facilities and Related Activities

- Keep regulations up to date and incorporate climate impact criteria
- Encourage reuse of C&D debris, including excavated material
- Provide technical assistance to facilities to improve operations
- Minimize GHG emissions from facilities (methane monitoring technologies & leak reductions)
- Support new funding for municipal landfill closure and landfill gas management grant program
- Continue Inactive Landfill Investigation program and support efforts to solidify wastes that contain PFAS compounds prior to disposal
- Support requirements for municipalities to develop and implement local solid waste management plans
- Enhance efforts to address waste tires



Transformative Legislative Action Needed

- **Developing EPR for paper and packaging**, and framework legislation that allows the addition of other products
- **Expand and amend the existing Food Donation & Food Scraps Recycling Law** (include smaller businesses and institutions, eliminate the mileage limit to an organics recycling facility)
- **Require a per ton disposal disincentive surcharge** on all waste disposed in NYS and all waste generated in NYS being sent for disposal out-of-state to provide financial support for reduction, reuse and recycling projects



Waste Projections and Goals 2023-2050



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New York State Waste Projections 2023 - 2050									
		2018	2023	2025	2027	2030	2032	2040	2050
MSW	Tons Generated	17,889,980	17,889,980	17,889,980	17,889,980	17,889,980	17,889,980	17,889,980	17,889,980
	Tons Diverted	3,399,096	3,935,796	4,651,395	5,724,794	7,155,992	9,123,890	11,628,487	15,206,483
	Recycling Rate (%)	19%	22%	26%	32%	40%	51%	65%	85%
CDD	Tons Generated	18,360,987	18,360,987	18,360,987	18,360,987	18,360,987	18,360,987	18,360,987	18,360,987
	Tons Diverted	11,751,032	12,301,861	13,219,911	13,770,740	14,321,570	14,688,790	15,056,009	15,606,839
	Recycling Rate (%)	64%	67%	72%	75%	78%	80%	82%	85%
Industrial	Tons Generated	1,932,296	1,932,296	1,932,296	1,932,296	1,932,296	1,932,296	1,932,296	1,932,296
	Tons Diverted	560,366	618,335	695,627	869,533	1,062,763	1,255,992	1,449,222	1,642,452
	Recycling Rate (%)	29%	32%	36%	45%	55%	65%	75%	85%
Biosolids	Tons Generated	1,372,854	1,372,854	1,372,854	1,372,854	1,372,854	1,372,854	1,372,854	1,372,854
	Tons Diverted	302,028	425,585	453,042	480,499	507,956	535,413	617,784	782,527
	Recycling Rate (%)	22%	31%	33%	35%	37%	39%	45%	57%
Bulk/Heavy Metals	Tons Generated	2,692,161	2,692,161	2,692,161	2,692,161	2,692,161	2,692,161	2,692,161	2,692,161
	Tons Diverted	2,369,102	2,369,102	2,396,023	2,422,945	2,422,945	2,476,788	2,503,710	2,557,553
	Recycling Rate (%)	88%	88%	89%	90%	90%	92%	93%	95%
Total Waste Stream	Tons Generated	42,248,278	42,248,278	42,248,278	42,248,278	42,248,278	42,248,278	42,248,278	42,248,278
	Tons Diverted	18,381,623	19,650,678	21,415,997	23,268,511	25,471,226	28,080,873	31,255,212	35,795,853
	Recycling Rate (%)	44%	47%	51%	55%	60%	66%	74%	85%



MSW				
	Tons Generated	Tons Diverted	Recycling Rate (%)	Per capita Waste Disposal (lbs/person/day)
2018	17,889,980	3,399,096	19%	4.09
2023	17,889,980	3,900,016	22%	3.91
2025	17,889,980	4,561,945	26%	3.71
2027	17,889,980	5,760,574	32%	3.37
2030	17,889,980	7,191,772	40%	2.97
2032	17,889,980	9,159,670	51%	2.42
2040	17,889,980	11,664,267	65%	1.71
2050	17,889,980	15,224,373	85%	0.72

NYS Population	
2018	19,530,351
2023	19,628,003
2025	19,667,259
2027	19,706,593
2030	19,765,713
2032	19,805,244
2040	19,963,686
2050	20,163,323



Public Comment Period

March 15 – May 15, 2023



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Public Comment Period

- **Public Comment Period:** Wednesday, March 15 to Monday, May 15, 2023
- **Comments can be submitted** by email to NYSSolidWastePlan@dec.ny.gov
 - Please include “Comments on SSWMP” in the subject line of the email.
- **Stay in the loop** – email NYSSolidWastePlan@dec.ny.gov or [sign up for the DEC Delivers Solid Waste and Recycling Newsletter](#)



Thank You

For more information on the New York State Solid Waste Management Plan:

<https://www.dec.ny.gov/chemical/41831.html>

Questions and comments can be emailed to
NYSSolidWastePlan@dec.ny.gov

